

11.124
1 17^o The method of claim 1, wherein coupling the sensors with each sensor
2 positioned with its axis of sensitivity in a different spatial direction comprises,
3 coupling the sensors with the axes of sensitivity in:
4 a first direction;
5 a second direction; and
6 a third direction.

1 18^o The method of claim 1, wherein rotating the sensors comprises, rotating the
2 sensors about the x-axis, the y-axis and the z-axis.

1 19^o The method of claim 1, wherein measuring one or more output signals from the
2 sensors comprises, measuring the output signals from the sensors at one or
3 more angles of rotation.

1 20^o The method of claim 1, wherein processing the output signals from the sensors
2 comprise, calculating one or more calibration coefficients from the measured
3 output signals of the sensors.

1 21^o The method of claim 1, wherein each sensor further includes a corresponding
2 ASIC having a local non-volatile memory; and wherein storing one or more
3 calibration coefficients includes storing the corresponding calibration coefficients
4 to the corresponding local non-volatile memories.

1 22^o The method of claim 1, wherein storing one or more calibration coefficients
2 includes storing the corresponding calibration coefficients to an external
3 database.

1 23^o The method of claim 1, wherein coupling, rotating, measuring, and processing
2 are provided in accordance with the Institute of Electrical and Electronic
3 Engineers Specification IEEE 337-1972 for the IEEE Standard Specification
4 Format Guide and Test Procedure for Linear, Single-Axis, Pendulous, Analog
5 Torque Balance Accelerometer.

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1 The method of claim ~~1~~, wherein the seismic sensor further comprises a proof
2 mass, the method further comprising controlling the position of the proof mass
3 at two or more locations using an electronic signal.

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1 The method of claim ~~10~~ further comprising correcting seismic sensor non-linear
2 characteristics using the positioning of the proof mass.

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1 The method of claim ~~11~~ further comprising determining a proof mass control
2 setting indicative of the mass position for correcting the non-linear
3 characteristics and storing the control setting.

1 27. 13. 19
1 The method of claim ~~5~~, wherein the seismic sensor further comprises a proof
2 mass, the method further comprising controlling the position of the proof mass
3 at two or more locations using an electronic signal and measuring the position
4 of the proof mass at two or more positions.

1 28. 14. 21
1 The method of claim ~~7~~, wherein the seismic sensor further comprises a proof
2 mass, the method further comprising controlling the position of the proof mass
3 at two or more locations using an electronic signal, determining a proof mass
4 control setting indicative of a mass position for correcting seismic sensor non-
5 linear characteristics, and storing the control setting.

Respectfully submitted,

Date: August 28, 2001


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